

240 County Road Ipswich, MA 01938-2723 Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

## New England Biolabs Certificate of Analysis

Product Name:	LongAmp® Taq 2X Master Mix
Catalog Number:	M0287S
Concentration:	2 X Concentrate
Packaging Lot Number:	10234118
Expiration Date:	04/2025
Storage Temperature:	-20°C
Specification Version:	PS-M0287S/L v2.0
Composition (1X):	60 mM Tris-SO4 (pH 9.1 @ 25°C), 20 mM (NH4)2SO4, 2 mM MgSO4, 0.3 mM dATP, 0.3 mM dCTP, 0.3 mM dGTP, 0.3 mM dTTP, 3 % Glycerol, 0.06 % IGEPAL® CA-630, 0.05 % Tween® 20, 125 units/ml LongAmp® Taq DNA Polymerase

LongAmp® Taq 2X Master Mix Component List				
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result	
M0287SVIAL	LongAmp® Taq 2X Master Mix	10211769	Pass	

Assay Name/Specification	Lot # 10234118
<b>Non-Specific DNase Activity (16 hour, Buffer)</b> A 50 µl reaction in 1X LongAmp® Taq Master Mix containing 1 µg of T3 or T7 DNA in addition to a reaction containing Lambda-HindIII DNA incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
PCR Amplification (30 kb Human Genomic DNA, Master Mix) A 25 $\mu$ I reaction in 1X LongAmp® Taq Master Mix and 0.4 $\mu$ M primers containing 500 ng Human Genomic DNA for 28 cycles of PCR amplification results in the expected 30 kb product.	Pass
<b>PCR Amplification (30 kb Lambda DNA, Master Mix)</b> A 25 μl reaction in 1X LongAmp® Taq Master Mix and 0.4 μM primers containing 1 ng Lambda DNA for 28 cycles of PCR amplification results in the expected 30 kb product.	Pass
<b>RNase Activity (Extended Digestion)</b> A 10 $\mu$ I reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 1 $\mu$ I of LongAmp® Taq 2X Master Mix is incubated at 37°C. After incubation for 4 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.	Pass





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Assay Name/Specification	Lot # 10234118
qPCR DNA Contamination (E. coli Genomic)	Pass
A minimum of 2.5 units of LongAmp® Taq DNA Polymerase is screened for the presence	
of E. coli genomic DNA using SYBR® Green qPCR with primers specific for the E. coli	
16S rRNA locus. Results are quantified using a standard curve generated from	
purified E. coli genomic DNA. The measured level of E. coli genomic DNA	
contamination is ≤ 1 E. coli genome.	

This product has been tested and shown to be in compliance with all specifications.

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.

Lea Antonopoulo Production Scientist 28 Nov 2023

Michae

Michael Tonello Packaging Quality Control Inspector 18 Mar 2024

